

Listing of Claims:

1. (Currently Amended) A method for dynamic spreadsheet reporting, comprising:
 - a) providing an electronic spreadsheet having a plurality of cells that are arrayed in a defined number of columns and rows;
 - b) providing a database in communication with said electronic spreadsheet;
 - c) receiving an expansion formula in at least one of said plurality of cells that identifies comprises at least one dimension member and instructions for expansion, said expansion formula functioning to control retrieval of data associated with the said at least one dimension member ~~by querying said database and to~~;
 - d) in response to rendering said electronic spreadsheet, using said at least one dimension member from said expansion formula to query querying said database to retrieve data associated with said at least one dimension member from said database;
 - e) storing said retrieved data associated with said at least one dimension member from said expansion formula in a cache for use to respond to one or more queries to said database for said at least one dimension member;
 - f) using said instructions for expansion from said expansion formula to automatically adjust at least one of the defined number of said columns and rows to accommodate said data responsive to said querying of said database; and
 - g) populating said adjusted columns and rows with said retrieved data while maintaining the operation and functionality of said electronic spreadsheet.

2. (Original) A method according to claim 1, wherein said electronic spreadsheet is supported by a spreadsheet application that provides formatting and calculation functionalities to said electronic spreadsheet.

3. (Original) A method according to claim 2, wherein said spreadsheet application operative resides on a computer system selected from the group consisting of a stand-alone client and a networked client.

4. (Original) A method according to claim 2, wherein said spreadsheet application is a collaborative spreadsheet application that operates across a plurality of networked computers.

5. (Original) A method according to claim 1, wherein said data includes at least one dimension member, and wherein said at least one dimension member is identified by at least one parameter set forth in said expansion formula.

6. (Original) A method according to claim 5, wherein said at least one dimension member is a data category.

7. (Original) A method according to claim 6, wherein said data category is selected from the group consisting of time periods, departments, account types, account categories, product types, product categories and combinations thereof.

8. (Original) A method according to claim 5, further comprising:

d) automatically updating said electronic spreadsheet to include a new dimension member upon introduction of said new dimension member to said database, provided the definition of said expansion formula calls for retrieval of said new dimension member from said database.

9. (Original) A method according to claim 1, wherein in automatically varying at

least one of the defined number of said columns and rows, said expansion formula does not impair operability or functionality of said electronic spreadsheet external to said data retrieval accommodation.

10. (Original) A method according to claim 1, further comprising defining a member

list in said database, said member list including hierarchical list of members within a given category of said data.

11. (Original) A method according to claim 1, wherein said expansion formula

utilizes at least one function selected from the group consisting of an EVEEXP function, an EVNXP function, an EvENE function, an EvLST function, an EvSET function, an EvPXR, and combinations thereof.

12. (Original) A method according to claim 11, wherein said expansion formula

utilizes at least two nested functions.

13. (Original) A method according to claim 1, further comprising:

d) recalculating said electronic spreadsheet based on data retrieval from said database controlled by said expansion formula, and
e) building a cache in a memory for said expansion formula.

14. (Original) A method according to claim 13, further comprising:

f) expanding said electronic spreadsheet by querying said database for a list of members as defined in expansion parameters included in said expansion formula;
g) adjusting the number of cells in a key range and a data range associated with said expansion formula as necessary to accommodate said list of members;
h) populating said key range with members from said list of members, and
i) copying formulas from at least one of said plurality of cells to an appropriate newly inserted cell to fill an entire data range.

15. (Original) A method according to claim 14, further comprising:

j) deleting said cache in said memory; and
k) recalculating said electronic spreadsheet in said expanded electronic spreadsheet.

16. (Currently Amended) A system for supporting dynamic spreadsheet reporting, comprising:

a client that includes a processor and associated data storage containing at least one database, said processor adapted to process programmatic instructions associated with an

electronic spreadsheet having a plurality of cells that are arrayed in a defined number of columns and rows; said programmatic instructions including directing said processor to:

receive at least one expansion formula inserted into in at least one of said plurality of cells that identifies comprises at least one dimension member and instructions for expansion, said expansion formula functioning to control retrieval of data associated with the at least one dimension member by querying said at least one database and to;

in response to rendering said electronic spreadsheet, use said at least one dimension member from said expansion formula to query querying said database to retrieve data associated with said at least one dimension member from said database;

store said retrieved data associated with said at least one dimension member from said expansion formula for use to respond to one or more queries to said database for said at least one dimension member;

use said instructions for expansion from said expansion formula to automatically adjust at least one of the defined number of said columns and rows to accommodate said data responsive to said querying of said database; and

populate said adjusted columns and rows with said retrieved data while maintaining the operation and functionality of said electronic spreadsheet.

17. (Original) A system according to claim 16, wherein said programmatic instructions provide formatting and calculation functionalities to said electronic spreadsheet.

18. (Original) A system according to claim 16, wherein said client communicates with a server across a network, and wherein said data storage is associated with said server.

19. (Original) A system according to claim 16, wherein said spreadsheet application is a collaborative spreadsheet application that operates across a plurality of networked computers.

20. (Original) A system according to claim 16, wherein said data includes at least one dimension member, and wherein said at least one dimension member is identified by at least one parameter set forth in said expansion formula.

21. (Original) A system according to claim 16, wherein said programmatic instructions affect automatic updating of said electronic spreadsheet to include a new dimension member upon introduction of said new dimension member to said database, provided the definition of said expansion formula calls for retrieval of said new dimension member from said database.

22. (Original) A system according to claim 16, wherein in automatically varying at least one of the defined number of said columns and rows, processing of said expansion formula by said processor does not impair operability or functionality of said electronic spreadsheet external to said data retrieval accommodation.

23. (Original) A system according to claim 16, wherein in processing said expansion formula, said processor processes at least one function selected from the group consisting of an

EVEEXP function, an EVNXP function, an EvENE function, an EvLST function, an EvSET function, an EvPXR function, and combinations thereof.

24. (Original) A system according to claim 16, wherein in processing said expansion formula, said processor processes at least two nested functions.